

CLKH results for BAF instances

Keld Helsgaun
Roskilde University, Denmark
December 2013

In his PhD thesis, “[Techniques hybrides de recherche exacte et approchée: application à des problèmes de transport](#)” (2008), Boris Bontoux defined a series of Generalized TSP instances, where the groups (clusters) are not formed by a clustering method (as is the case for GTSPLIB), but are formed pseudorandomly. These instances, called BAF instances, are derived from TSPLIB instances by associating each vertex i ($1 \leq i \leq n$) with group C_j , where $j = (i \bmod m) + 1$, and $m = \lceil n / 5 \rceil$.

The table below shows the current best costs found by CLKH.

Name	Cost	Name	Cost
baf10att48	26494	baf40d198	108166
baf10gr48	12085	baf40kroA200	172877
baf10hk48	26286	baf40kroB200	182410
baf11eil51	1047	baf41gr202	173202
baf12brazil58	68470	baf45ts225	1129880
baf14st70	2017	baf46pr226	1072090
baf16eil76	1442	baf53gil262	14302
baf16pr76	379712	baf53pr264	639763
baf20kroA100	90992	baf60pr299	386533
baf20kroB100	88032	baf64lin318	403681
baf20kroC100	88683	baf80rd400	115665
baf20kroD100	87324	baf84fl417	276257
baf20kroE100	91154	baf87gr431	1395481
baf20rat99	4542	baf88pr439	1132360
baf20rd100	31102	baf89pcb442	473413
baf21eil101	2021	baf99d493	273631
baf21lin105	65260	baf107att532	285410
baf22pr107	361766	baf107si535	111634
baf24gr120	26712	baf113pa561	24687
baf25pr124	403827	baf115rat575	47615
baf26bier127	384515	baf131p654	1158443
baf28pr136	545604	baf132d657	524873
baf29pr144	393208	baf145u724	480374
baf30kroA150	134271	baf157rat783	99102
baf30kroB150	131266	baf201pr1002	4310542
baf31pr152	661668	baf207si1032	263704
baf32u159	283231	baf212u1060	3736486
baf39rat195	9938	baf217vm1084	4490246